

What is Claimed is:

1. A device to be mounted on a structure for communicating a wireless signal in at least one frequency range, comprising:
 - an antenna capable of communicating the wireless signal, said antenna having an antenna shape; and
 - a material encasing said antenna and having an external shape different from said antenna shape, wherein said material facilitates attachment to the structure.
2. The device of claim 1, wherein said material is emissive.
3. The device of claim 2, wherein said material is insulative.
4. The device of claim 1, wherein the structure is a transformer enclosure and further comprising a conductor communicatively coupled to said antenna and that that passes through an aperture in the transformer enclosure.
5. The device of claim 4, wherein said conductor is communicatively coupled to a first communication device.
6. The device of claim 5, wherein said first communication device provides communication to a customer premise that is electrically coupled to the transformer in the transformer enclosure.
7. The device of claim 5, wherein the first communication device is a backhaul point.
8. The device of claim 5, wherein said first communication device is disposed at a distribution transformer.
9. The device of claim 4, wherein said antenna is communicatively coupled to at least one low voltage power line.
10. The device of claim 1, further comprising an insulative material to mounted between said antenna and the structure.

11. The device of claim 1, wherein the structure is a transformer enclosure and said material is disposed between said antenna and the pad mounted electrical transformer when said device is mounted to the transformer enclosure.
12. The device of claim 1, wherein said antenna receives signals in a predetermined frequency range, and wherein said material is emissive within said predetermined frequency range.
13. The device of claim 1, wherein said material has a substantially planar face.
14. The device of claim 1, wherein said antenna is disk-shaped.
15. The device of claim 1, wherein said material is insulative.
16. The device of claim 1, wherein said material comprises at least one of the following: rubber, plastic, and Mylar.
17. The device of claim 1, wherein said material has a thickness that facilitates preventing access to said antenna.
18. The device of claim 1, wherein a first external dimension of said antenna is substantially different than the first external dimension of said material.
19. The device of claim 18, wherein a second external dimension of said antenna is substantially different than the second external dimension of said material.
20. The device of claim 18, wherein said material has a rectangular box shape and said antenna has a disk shape.
21. The device of claim 1, wherein said antenna is directionally oriented within said material.
22. The device of claim 1, wherein said material comprises holes to facilitate mounting to the structure.

23. The device of claim 1, wherein said antenna is a substantially flat rectangular metallic material.

24. The device of claim 1, wherein said material prevents structural deformation of said antenna.

25. A system for communicating a wireless signal at a pad mounted electrical transformer, comprising:

- a protective material;

- an device embedded in said material;

- wherein a first external dimension of said antenna is substantially different than the first external dimension of said material; and

- wherein a second external dimension of said antenna is substantially different than the second external dimension of said material.

26. The device of claim 25, further comprising a first communication device communicatively coupled to said antenna.

27. The system of claim 26, wherein said first communication device is communicatively coupled to at least one low voltage power line.

28. The system of claim 27, wherein the low voltage power line is in electrically coupled to a customer premise.

29. The system of claim 27, further comprising a second communication device in communication with said first communication device.

30. The system of claim 29, wherein said first communication device, comprises:

- a first modem;

- a first router in communication with said first modem; and

- a first wireless transceiver in communication with said first modem.

31. The system of claim 30, wherein said second communication device, comprises:

- a second modem;

a second router in communication with said second modem; and
a second wireless transceiver in communication with said second modem.

32. The system of claim 31, wherein said second wireless transceiver uses IEEE standard 802.11.

33. The system of claim 30, wherein said first wireless transceiver uses IEEE standard 802.11.

34. The system of claim 30, wherein said antenna comprises a substantially planar surface.

35. The system of claim 30, wherein said material is emissive.

36. The system of claim 30, further comprising an insulative material located between said antenna and the pad mounted electrical transformer.

37. The system of claim 30, wherein said material is located between said antenna and the pad mounted electrical transformer.

38. The system of claim 30, wherein said antenna receives signals in a predetermined frequency range, and wherein said material is emissive within said predetermined frequency range.

39. The system of claim 30, wherein said antenna is disk-shaped.

40. A method installing an antenna device at a transformer enclosure, said antenna device comprised of an antenna that is communicatively coupled to a communication conductor and wherein said antenna is encased in a protective material that includes a mounting hole, comprising:

determining a location on the pad mounted transformer that facilitates communication with the antenna device;

creating at least one mounting aperture in the enclosure for mounting the antenna device at the location;

placing said antenna device substantially proximate to said location;

attaching the antenna device to the enclosure by using the mounting aperture and the mounting hole; and
attaching the communication conductor to a communication device.

41. The method of claim 40, further comprising orienting said antenna in a direction that facilitates communication with the antenna.

42. The method of claim 40, wherein the antenna receives signals in a predetermined frequency range, and wherein said material is emissive within said predetermined frequency range.

43. The method of claim 40, further comprising communicatively coupling said antenna to at least one low voltage power line.

44. The method of claim 40, further comprising painting the antenna device substantially the same color as the transformer enclosure.

45. The method of claim 40, wherein the antenna is directionally oriented within the material.

46. The method of claim 40, where the antenna has an antenna shape; and the material encasing said antenna has an external shape different from said antenna shape.

47. The method of claim 40, wherein a first external dimension of the antenna is substantially different than the first external dimension of the material; and

48. The method of claim 47, wherein a second external dimension of the antenna is substantially different than the second external dimension of the material.